MINUTES

of the

SECOND MEETING

of the

SCIENCE, TECHNOLOGY AND TELECOMMUNICATIONS COMMITTEE

July 29, 2014 State Capitol, Room 311 Santa Fe

The second meeting of the Science, Technology and Telecommunications Committee for the 2014, interim was called to order by Senator Michael Padilla, chair, on Tuesday, July 29, 2014, at 10:00 a.m. in Room 311 of the State Capitol.

Absent

Sen. William F. Burt

Present

Sen. Michael Padilla, Chair

Rep. Carl Trujillo, Vice Chair

Rep. Kelly K. Fajardo

Rep. Roberto "Bobby" J. Gonzales

Rep. Jason C. Harper

Sen. Linda M. Lopez

Sen. Bill B. O'Neill

Rep. Debbie A. Rodella

Sen. John C. Ryan

Rep. James E. Smith

Rep. Luciano "Lucky" Varela

Rep. Monica Youngblood

Advisory Members

Sen. Carlos R. Cisneros

Sen. Ron Griggs

Sen. Richard C. Martinez

Rep. Jane E. Powdrell-Culbert

Rep. Nick L. Salazar

Rep. Don L. Tripp

Rep. Stephanie Garcia Richard Sen. Phil A. Griego

Sen. Timothy M. Keller

Rep. Bill McCamley

Sen. Steven P. Neville

Sen. William H. Payne

Sen. Peter Wirth

Guests Legislators

Sen. Jacob R. Candelaria

Rep. William "Bill" R. Rehm

Staff

Gordon Meeks, Legislative Council Service (LCS)

Ralph Vincent, LCS

Carolyn Ice, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file and are located on the New Mexico Legislature web site.

Tuesday, July 29

Members of the committee introduced themselves, and the chair invited members of the public to introduce themselves.

E-911 Fund Status and Next Gen

Wayne Sowell, director of the Local Government Division, Department of Finance and Administration (DFA), and Jacqueline Miller, deputy secretary, Department of Information Technology (DOIT), provided the committee with an overview of the Enhanced 911 Program (E-911) and a status report of its current activities. The E-911 is considered a collaboration between the DFA and the DOIT. The E-911 is administratively attached to the Local Government Division of the DFA and pays on behalf of local governments for the costs of providing E-911 services.

The State Board of Finance is responsible for approving all E-911 expenditures, and the DOIT is responsible for approving projects over \$100,000. The DOIT provides support, guidance and oversight on projects and procurements, as well as reviewing appropriation requests and legislation related to information technology (IT) and making recommendations to the DFA and the Legislative Finance Committee (LFC) for formal approval by the legislature and the governor.

Mr. Sowell told the committee that there are four equipment upgrades planned for fiscal year (FY) 2015 for Santa Fe, Las Cruces, Los Lunas and Las Vegas based on the five-year equipment upgrade plan as stated in statute. The different amounts for each area depend on the needs of the population, age and status of current equipment and site readiness. Doña Ana County has also started construction on a new 911 facility.

Mr. Sowell described the IT project certification time line of E-911 upgrade projects to the committee. The time line is composed of three phases: initiation and planning, implementation and project closeout. A project must be approved by the State Board of Finance before the implementation phase.

New Mexico participated in a workshop provided by the federal Department of Homeland Security's Office of Emergency Communications early in 2012. The second workshop will be in 2015 and will continue with education, planning and funding. The "next generation" is working on the application and integration of public safety broadband and further developing

business policies as younger generations move away from the use of landlines.

Questions and discussion topics of the committee members included:

- the allocation of money to the DOIT;
- cost differences for equipment upgrades around the state;
- the function of the DOIT in the upgrade and approval process;
- dispatcher curriculum in the New Mexico Law Enforcement Academy;
- the DOIT's authority in the dispatcher curriculum;
- the partnership with CenturyLink;
- distribution of money and whether the distributed money is only used for equipment upgrades;
- funding issues in Alamogordo and Otero County;
- the starting date of upgrades;
- how fund amounts are determined;
- a national conference on E-911;
- interoperability between local government and federal agencies;
- a service level time line for serving new subdivisions; and
- local E-911 backup plans.

Computer Coding Education

Senate Bill (SB) 148, "Computer Programming As School Language", was introduced by Senator Candelaria during the 2014 legislative session. SB 148 proposes adding computer coding as a foreign language credit for K-12 education in response to the need for coding as a foundational skill in many areas of the current job market. Senator Candelaria told the committee that computer coding-related jobs, such as those for software engineers and software developers, are considered some of the "best" jobs within the current job market, with the demand for these positions increasing.

Samantha Sengel, chief community engagement officer, Central New Mexico Community College (CNM), presented the committee with information regarding an upcoming coding bootcamp provided by CNM as part of an initiative to prepare individuals of all ages for the work force. "Deep Dive Coding Bootcamp" begins August 11, 2014 at CNM's STEMulus Center. The classes are nine hours, five days a week for nine weeks and are equivalent to taking eight classes during conventional education hours. Students have access to the latest web tools and technologies and participate in team projects that mirror real-world software development shops.

Currently, the bootcamp does not offer a degree or certificate upon completion of the program; however, Senator Candelaria and Ms. Sengel assured the committee that there are many local companies and organizations, such as Lavu, University of New Mexico, Memorial Medical Center, boomtime, POD Network, Bandojo, SportXast and W3PR, looking to hire individuals with coding skills.

Questions and discussion topics of the committee members included:

- the status of SB 148;
- the economic benefit of enrolling in the bootcamp;
- the accreditation of computer coding curriculum;
- similar programs at other post-secondary institutions;
- the needs of proposed legislation;
- the cost of tuition for programs;
- the comparative cost of similar programs;
- expansion of bootcamps;
- computer training for veterans;
- dilution of the meaningfulness of college degrees;
- the context of "bootcamp" within the broader curriculum of computer science;
- implementation in elementary schools; and
- funding and other resources.

Cybersecurity and Data Breach

Representative Rehm presented a status update of House Bill (HB) 224 to the committee. Currently, 47 states have data breach laws; New Mexico, Arizona and Hawaii are the only states currently without data breach laws. The Neiman Marcus breach, which involved card data being stolen over an eight-month period in 2014, was the catalyst for an influx of cybersecurity legislation.

Representative Rehm told the committee that with the possibility or confirmation of a data breach, the state must notify individuals within 10 business days, and the attorney general must be notified within 10 business days if more than 50 New Mexico residents are affected. The bill allows for a shorter notification deadline and gives customers the ability to sue for recovery costs of the breach and statutory damages.

Individuals affected by a security breach will be provided notification of a breach by either: 1) United States mail; 2) electronic notification; or 3) substitute notification, if the entity demonstrates that the cost of providing notification would exceed \$100,000, the number of residents to be notified exceeds 50,000 or the entity does not have a record of the physical addresses for customers affected.

Representative Rehm is looking for an endorsement for the bill in November.

Questions and discussion topics of the committee members included:

- a House Consumer and Public Affairs Committee contact;
- the obligation to notify credit card companies, banks and other institutions;
- methods of notification;

- private label credit issuers' responsibilities;
- positions of the business community;
- the federal law;
- why Verizon opposes such legislation; and
- how small businesses will be affected.

DOIT Project Spreadsheet

Darryl Ackley, secretary of information technology, provided the committee with an overview of the DOIT and a status report on its current activities. Secretary Ackley provided a chart listing the Enterprise Project Management Office's (EPMO's) project portfolio for the fourth quarter of FY 2014. The chart includes the project name, agency, a brief description of the project and the estimated costs.

The EPMO performs the following functions:

- providing IT management life cycle policies, methodologies and templates for IT initiatives to promote quality and success and reporting regularly to the executive and legislative branches and the Information Technology Commission on the status of the state's IT project portfolio;
- providing support, guidance and oversight on IT projects and procurements to promote improved outcomes;
- reviewing executive agencies' IT plans for prudent allocation of IT resources and monitoring project compliance with the agencies' plans and the state IT strategic plan;
- reviewing appropriation requests and legislation related to IT and making recommendations to the DFA and LFC for formal approval by the legislature and the governor; and
- providing senior project management guidance for enterprise projects.

Secretary Ackley reviewed the project certification process and discussed FY 2014 fourth quarter closed projects. Eight projects closed with a combined budget of \$53,218,209. All of the projects successfully accomplished their business objectives, and all were completed on or within budget. One-half were completed on or within the baseline schedule. He also explained why there were delays. Reasons included loss of resources and reorganization. Secretary Ackley continued his presentation with an update on the Automated System Program and Eligibility Network (ASPEN) that will soon replace the current Income Support Division and Integrated Service Delivery systems of the Human Services Department.

Secretary Ackley told members that all major project milestones have been completed, with the ASPEN project currently transitioning into maintenance and operations as of July 1, 2014. The project is scheduled for closeout at the project certification process phase, with the EPMO meeting with the DOIT regularly to monitor its progress. He discussed several other projects and each project's progress on the EPMO time line.

Questions and discussion topics of the committee members included:

- the reason for a change order;
- why one project came in on budget;
- penalties or awards for vendor performance;
- maintenance and operation costs compared to design deployment contract costs;
- monitoring of operations;
- maintenance of a system; and
- contractual terms.

2014 SHARE Status

Secretary Ackley told the committee that the Statewide Human Resources Accounting and Management Reporting System (SHARE) has been upgraded to the latest Oracle update, Oracle II G, without any service disruption. He testified that the system is completely stabilized under its new platform.

SHARE is the most widely used enterprise database and serves as a portal for a large amount of information available to users. Secretary Ackley told the committee that the SHARE system is now stable, robust and reliable, with sustained, documented performance improvement. He testified that users expressed satisfaction with the new upgrade. A survey on customer satisfaction was requested by members of the committee.

Secretary Ackley said the next step for SHARE is to continue to provide technical training for staff members and refine its development processes, as well as implement improved reporting capabilities and technical upgrades to foundational tools.

Questions and discussion topics of the committee members included:

- the definition of "upgrade";
- customer feedback:
- training courses for users;
- a perpetual license for Oracle's PeopleSoft applications;
- a survey of users in state agencies;
- the lack of module use;
- accounting control;
- what percentage of vendors are New Mexico companies;
- who is responsible for cybersecurity; and
- organization.

Minutes

Minutes from the last meeting were approved by members of the committee.

Cybersecurity and Data Breach (Continued)

Secretary Ackley presented a brief overview of cybersecurity to the committee. He defined cybersecurity as ensuring that critical data and systems are protected against attackers, mishaps and misuse, and he used an airport security analogy to illustrate the technical aspects as well as policies and procedures involved in cybersecurity. He emphasized the importance of demystifying cybersecurity for policymakers.

Secretary Ackley also expressed concerns about data breaches, which are a primary risk of cybersecurity. Causes of data breaches are almost evenly divided among malicious activity; negligence and other human factors; and system misconfigurations. He provided examples, such as the 2013 Target data breach that affected about 70 million individuals. He testified that the DOIT is currently working to improve technical aspects and policies and procedures by implementing the following:

- enhancing intrusion detection system and intrusion prevention system capabilities for all internet traffic on the state's core;
- improving log aggregation, analysis capability and forensic capabilities for detected threats:
- providing security configuration assistance to agencies;
- establishing a single security point of contact with each agency to streamline coordination; and
- a multi-agency team evaluation of current cybersecurity programs.

Members of the committee requested more information on questions listed on slide five of Secretary Ackley's presentation.

Questions and discussion topics of the committee members included:

- the last breach of the state's system;
- who is in charge of the state's cybersecurity;
- a cybersecurity czar;
- an organizational chart;
- mobile device management policies;
- IT staff assigned to each agency; and
- external and internal threats.

Broadband Telecommunication and Partnership for Assessment of Readiness for College and Careers (PARCC) Status

Gar Clarke, DOIT, gave the committee an overview and the status of the New Mexico broadband program. The program is currently funded by both federal and state awards, and its two major objectives are to define broadband availability and enhance its adoption. The four major statewide projects are: 1) mapping; 2) planning; 3) capacity-building; and 4) technical

assistance.

Mapping involves acquiring customer and service area data twice yearly from each broadband telecommunication provider in New Mexico, and those data are used to create a map that is updated each data cycle. Mr. Clarke provided the committee with a map of New Mexico illustrating the current internet provider data in his presentation. He went on to discuss the other major statewide projects that are currently under way.

Planning is developed from the mapping data and is used to create opportunities for integration and collaboration in areas of construction, education, marketing and economic analysis. Capacity-building focuses on forming a statewide collaborative committee and a municipal/tribal broadband master planning guide to assist in efforts in the planning and implementation of broadband within different communities. Technical assistance involves training of and access to resources by individuals across the state.

Mr. Clarke told the committee that the "Community Broadband Master Plan Guidebook" is the only one of its kind in the country and contain requirements, collaborative structure, technology models, business cases, funding strategies, benefits, risks and community engagement.

Questions and discussion topics of the committee members included:

- radio frequency propagation;
- models;
- coverage;
- community anchor site assessments;
- a three-tiered approach;
- digital microwaves;
- mapping;
- the impact of the broadband program;
- awareness of the broadband program;
- an independent broadband committee;
- chapter houses;
- an executive committee;
- · consolidated purchasing;
- standardized equipment requests; and
- geoservices.

Ferdi Serim, education technology coordinator, Public Education Department, gave the committee a briefing on PARCC technology readiness. Mr. Serim testified that 62% of schools in the state are online-testing-ready, while 34% are using proctor-caching only and 4% have insufficient bandwidth.

Thirty-three schools have less than five kilobytes per second per student and cannot support online assessments or digital learning, while 266 schools have less than 55 kilobytes per second per student and can only support online assessments with proctor-caching on local networks and limited digital learning. However, there are 492 schools with more than 55 kilobytes per second per student that can support online assessments over the internet and digital learning.

PARCC is currently working to create reliable networks at each school that are properly configured to deliver tests, as well as provide staff at district and school levels who are familiar with test administration and capable of "on the spot" troubleshooting.

Questions and discussion topics of the committee members included:

- a Colorado fund for expansion of broadband;
- which schools are receiving money; and
- linkage with the Public Regulation Commission and independent company providers.

The committee decided to place PARCC on the November agenda.

Adjournment

There being no further business before the committee, the meeting adjourned at 5:25 p.m.